

IN THE CLAIMS

1. (Currently Amended) A vaccine composition containing proteolipidic cochlear structures obtained from ~~vesicles found in the outer membranes~~ vesicles of live microorganisms.
2. (Currently Amended) The vaccine composition according to Claim 1, with said cochlear structures comprised of proteins, lipids and ~~molecular structures~~ associated to pathogens associated molecular pattern.
3. (Currently Amended) The vaccine composition according to Claim 2, with said pathogens associated molecular pattern ~~molecular structures associated to pathogens~~ added at a concentration between 1 % and 30 % of the protein weight of the cochlear structure.
4. (Currently Amended) The vaccine composition according to Claim 3, with said pathogens associated molecular pattern ~~molecular structures associated to pathogens~~ selected from the group consisting in of lipopolysaccharides, peptidoglycan, lipoprotein, teichoic acid, flagellin and lipophosphoglycane.
5. (Previously Presented) The vaccine composition according to Claim 1, characterized by the fact that the live organism supplying the vesicles of outer membrane comprising a bacterial, protozoan or animal cell organism.

6. (Previously Presented) The vaccine composition according to Claim 5, characterized by the fact that said bacterium is one of Gram negative or Gram positive.

7. (Currently Amended) The vaccine composition according to Claim 6, characterized by the fact that said Gram negative bacterium comprises one of the Neisseria, neisseria haemophilus Haemophilus, salmonella Salmonella, vibrio Vibrio, pseudomona Pseudomona or shigella Shigella genus.

8. (Currently Amended) The vaccine composition according to Claim 6, characterized by the fact that said Gram positive bacterium may be of the streptococcus Streptococcus or staphylococcus Staphylococcus genus.

9. (Previously Presented) The vaccine composition according to Claim 5, characterized by the fact that said live organism is the protozoo of the Leishmania genus.

10. (Previously Presented) The vaccine composition according to Claim 5, characterized by the fact that the cochlear structures are extracted from a tumor cell.

11. (Previously Presented) The vaccine composition according to Claim 51, wherein the antigens are in a ratio with the proteins present in the cochlear structure of 0.2 to 2.7 μg to 3 to 9 μg of protein.

12. (Previously Presented) The vaccine composition according to Claim 51, wherein the antigens are selected from the group consisting in: natural or recombining proteins, peptides, saccharides, nucleic acids, conjugates or allergenics.

13. (Previously Presented) The vaccine composition according to Claim 12, wherein the antigen is a protein from the hepatitis C virus.

14. (Previously Presented) The vaccine composition according to Claim 12, wherein the antigen is the recombining protein P1 from papillomavirus.

15. (Previously Presented) The vaccine composition according to Claim 12, wherein the antigen is the epitope T or B.

16. (Currently Amended) A vaccine adjuvant containing comprising proteolipidic cochlear structures obtained from vesicles found in the outer membranes of vesicles of live organisms.

17. (Currently Amended) The vaccine adjuvant according to Claim 16, wherein said cochlear structures comprise proteins, lipids, and pathogens associated molecular pattern ~~molecular structures associated to pathogens~~.

18. (Currently Amended) The vaccine adjuvant according to Claim 17, wherein said pathogens associated molecular pattern ~~molecular structures associated to pathogens~~ are found at a concentration between 1 % and 30 % of the protein weight of the structure.

19. (Currently Amended) The vaccine adjuvant according to Claim 17, wherein said pathogens associated molecular pattern ~~molecular structures associated to pathogens~~ are selected from the group consisting of lipopolysaccharide, peptidoglycan, lipoprotein, teichoic acid, flagellin and lipophosphoglycan.

20. (Previously Presented) The vaccine adjuvant according to Claim 16, wherein the live organism supplying the vesicles of outer membrane used to form the cochlear structures is a bacterium, a protozoan or an animal cell.

21. (Previously Presented) The vaccine adjuvant according to Claim 20, wherein said bacterium is a Gram negative or a Gram positive.

22. (Currently Amended) The vaccine adjuvant according to Claim 21, wherein said Gram negative bacterium is one of neisseria Neisseria, haemophilus Haemophilus, salmonella Salmonella, vibrio Vibrio, pseudomona Pseudomona or shigella Shigella genus.

23. (Currently Amended) The vaccine adjuvant according to Claim 21, wherein said Gram positive bacterium is one of the streptococcus Streptococcus or staphylococcus Staphylococcus genus.

24. (Currently Amended) The vaccine adjuvant according to Claim 20, characterized by the fact that said live organism is a protozoan organism from the Leishmania Leishmania genus.

25. (Previously Presented) The vaccine adjuvant according to Claim 20, said cochlear structures being derived from a tumor cell.

26. (Previously Presented) A vaccine composition containing vesicles obtained from the outer membrane of live organisms .

27. (Currently Amended) The vaccine composition according to Claim 26, said outer membrane vesicles comprising proteins, lipids and molecular pathogens associated molecular pattern structures associated to pathogens.

28. (Currently Amended) The vaccine composition according to Claim 27, with said pathogens associated molecular pattern ~~molecular structures associated to pathogens~~ are in a concentration between 1 % and 7 % of the protein weight of the structure.

29. (Currently Amended) The vaccine composition according to Claim 27, said pathogens associated molecular pattern ~~molecular structures associated to pathogens~~ being selected from the group consisting of lipopolysaccharide, peptidoglycane, teichoic acid, flagellin and lipophosphoglycane.

30. (Previously Presented) The vaccine composition according to Claim 26, characterized by the live organism supplying the vesicles of outer membrane used to form the cochlear structures is a bacterium, a protozoan or an animal cell.

31. (Previously Presented) The vaccine composition according to Claim 30, said bacterium is a Gram negative or a Gram positive.

32. (Currently Amended) The vaccine composition according to Claim 31, said Gram negative bacterium is one of neisseria *Neisseria*, haemophilus *Haemophilus*, salmonella *Salmonella*, vibrio *Vibrio*, pseudomona *Pseudomona* or shigella *Shigella* genus.

33. (Currently Amended) The vaccine composition according to Claim 31, characterized by the fact that said Gram positive bacterium is one of the streptococcus Streptococcus or staphylococcus Staphylococcus genus.

34. (Previously Presented) The vaccine composition according to Claim 30, said live organism is a protozoan organism from the Leishmania genus.

35. (Previously Presented) The vaccine composition according to Claim 30, with the outer membrane vesicles derived from a tumor cell.

36. (Previously Presented) The vaccine adjuvant containing vesicles extracted from the outer membrane of live organisms.

37. (Previously Presented) The vaccine adjuvant according to Claim 36 said outer membrane vesicles comprising proteins, lipids, and molecular structures associated to pathogens.

38. (Previously Presented) The vaccine adjuvant according to Claim 37, with said molecular structures associated to pathogens are in a concentration between 1 % and 7 % of the protein weight of the structure.

39. (Currently Amended) The vaccine adjuvant according to Claim 37, said pathogens associated molecular pattern molecular structures associated to

pathogens being selected from the group consisting of lipopolysaccharide, peptidoglycane, teichoic acid, flagellin and lipophosphoglycane.

40. (Currently Amended) The vaccine adjuvant according to Claim 36, characterized by the fact that the live organism supplying the vesicles of outer membrane used to form the cochlear ~~structures~~ structures is a bacterium, a protozoan or an animal cell.

41. (Previously Presented) The vaccine adjuvant according to Claim 40, said bacterium is a Gram negative or a Gram positive.

42. (Currently Amended) The vaccine adjuvant according to Claim 41, said Gram negative bacterium is one of *Neisseria* *neissera*, *Haemophilus* *haemophilus*, *Salmonella* *salmonella*, *Vibrio* *vibrio*, *Pseudomonas* *pseudomona* or *Shigella* *shigella* genus.

43. (Currently Amended) The vaccine adjuvant according to Claim 41, said Gram positive bacterium is one of the *Streptococcus* *streptococcus* or *Staphylococcus* *staphylococcus* genus.

44. (Previously Presented) The vaccine adjuvant according to Claim 40, said live organism is a protozoan from the *Leishmania* genus.

45. (Previously Presented) The vaccine adjuvant according to Claim 40, the outer membrane vesicles being derived from a tumor cell.

46. (Previously Presented) A method for obtaining cochlear structures from vesicles found in the outer membrane of live organisms, comprising the following steps:

(a) preparing from outer membrane vesicles, of a solution with a total protein concentration between 3 and 6 mg/mL, and adding a non-ionic detergent is added at a concentration 10 times that of the proteins;

(b) filtering through a membrane with a pore size of 0.2 μm , with the aim of sterilizing and eliminating vesicle aggregates;

(c) executing a rotational dialysis or a tangential filtration against a solution containing concentrations of a multivalent ion, particularly Ca^{2+} , Zn^{2+} , or Mg^{2+} , between 2.5 and 6.5 mM, at conditions buffered at $\text{pH } 7.4 \pm 0.2$; and

(d) mechanically treating the resultant cochlear structures to homogenize the size of the particles.

47. (Previously Presented) The vaccine composition according to Claim 1, wherein the composition is administrable mucosally, parenterally, or through a combination of both methods.

48. (Previously Presented) The vaccine composition according to Claim 26, wherein the composition is administrable mucosally, parenterally, or through a combination of both methods.

49. (Previously Presented) The adjuvant according to Claim 16, wherein the composition is administrable mucosally, parenterally, or through a combination of both methods.

50. (Previously Presented) The adjuvant according to Claim 36, wherein the composition is administrable mucosally, parenterally, or through a combination of both methods.

51. (Previously Presented) The vaccine composition of claim 1, further comprising at least one or more antigens.

52. (Previously Presented) The vaccine composition of claim 51, further comprising an excipient.

53. (Previously Presented) The method of claim 46, further comprising adding antigens or molecular structure associated to pathogens to the solution.

54. (Previously Presented) The method of claim 53, following step (a) homogenizing at 0.2 to 2.7 μg for each 3 to 9 μg of protein for the antigens and from 1 to 30% of the protein concentration for the molecular structures.

55. (Previously Presented) The method of claim 46, wherein the mechanical treating comprises sonication in a water bath at a temperature between 15°C and 25°C for a period of about 45 minutes.

56. (New) A mucosal administrable vaccine or vaccine adjuvant comprising proteolipidic cochlear structures derived from the outer membranes of live microorganisms.